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PATENT

S.N. 10/810,864

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below:

1. (Currently Amended) A method of operating a power supply controller comprising:
- organizing output drive pulses of the power supply controller to into a plurality of sets with each set of the plurality of sets having a plurality of timing slots for the output drive pulses;
 - deleting a first drive pulse in a first set of the plurality of sets from a first timing slot when a load current of the power supply controller is less than a first current value; and
 - deleting, in a second set, the first drive pulse from the first timing slot and a second drive pulse from a second timing slot in a second set of the plurality of sets after the power supply controller has issued the first set;
 - reinserting into a third set a first number of deleted drive pulses wherein the third set is issued subsequent to the second set; and
 - reinserting into a fourth set a second number of deleted drive pulses wherein the fourth set is issued subsequent to the third set and wherein the second number is greater than the first number.

2. (Currently Amended) The method of claim 1 wherein deleting, in the second set, the first drive pulse from the first timing slot and the second drive pulse from the second timing slot includes keeping an error voltage of the power supply controller constant.

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3. (Currently Amended) The method of claim 1 wherein deleting, in the second set, the first drive pulse from the first timing slot and the second drive pulse from the second timing slot includes deleting the first drive pulse from the first timing slot and deleting the second drive pulse from the second timing slot that is non-adjacent to the first timing slot.

4. (Original) The method of claim 1 wherein organizing the output drive pulses into the plurality of sets with each set of the plurality of sets having the plurality of timing slots includes forming each set with a same number of timing slots.

5. (Original) The method of claim 1 wherein organizing the output drive pulses into the plurality of sets with each set of the plurality of sets having the plurality of timing slots includes forming each set with a different number of timing slots.

6. (Currently Amended) The method of claim 1 ~~further including wherein re-inserting into the third set the first number of one deleted drive pulse pulses when an output voltage formed by the output drive pulses decreases to a first voltage~~ includes re-inserting the first drive pulse into the first timing slot.

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7. (Currently Amended) A method of forming a power supply controller comprising:

forming the power supply controller to organize output drive pulses into a plurality of sets with each set having a plurality of timing slots for the output drive pulses;

forming the power supply controller to delete a first number of drive pulse pulses from respective timing slots in a first set of the plurality of sets ~~from a first timing slot~~ when a load current of the power supply controller is less than a first current value; and

forming the power supply controller to delete in a second set both the first number of drive pulses plus a second number of drive pulse pulses from a second respective timing slot slots in the second set ~~of the plurality of sets~~ after the power supply controller has issued the first set.

8. (Currently Amended) The method of claim 7 wherein forming the power supply controller to delete in the second set both the first number of drive pulses plus the second number of drive pulse pulses from the second timing slot includes forming the power supply controller to delete the a first drive pulse from the a first timing slot and the a second drive pulse from ~~the a~~ second timing slot.

9. (Currently Amended) The method of claim 8 wherein forming the power supply controller to delete the first drive pulse from the first timing slot and the second drive pulse from the second timing slot includes forming the power supply controller to delete the first drive pulse from the first timing slot and the second drive pulse from the second timing slot that is non-adjacent to the first timing slot.

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10. (Currently Amended) The method of claim 7 wherein forming the power supply controller to organize the output drive pulses into the plurality of sets with each set having the plurality of timing slots includes forming the power supply controller to form each set with sixteen timing slots.

11. (Currently Amended) The method of claim 7 wherein forming the power supply controller to organize the output drive pulses into the plurality of sets with each set having the plurality of timing slots includes forming the power supply controller to form each set with a different number of timing slots.

12. (Currently Amended) The method of claim 7 further including forming the power supply controller to re-insert at least one deleted drive pulse into a third set ~~when~~ responsively to an output voltage formed by the output drive pulses decreases decreasing to a first voltage.

13. (Currently Amended) The method of claim 7 further including forming the power supply controller to delete all drive pulses from a set.

14. (Currently Amended) The method of claim 12 further including forming the power supply controller to sequentially increase the number of re-insert all deleted re-inserted drive pulse for each set subsequent to the third set when responsively to an the output voltage formed by the output drive pulses decreases decreasing to a second voltage that is less than the first voltage.

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15. (Currently Amended) The method of claim 7 further including forming the power supply controller to maintain an error voltage constant during each set of the plurality of sets.

16. (Currently Amended) The method of claim 7 wherein forming the power supply controller to delete the first number of drive pulse pulses in the first set of the plurality of sets from the first timing slot when the load current of the power supply controller is less than the first current value includes counting a first number of current reversals through an energy storage inductor to determine when the load current of the power supply controller is less than the first current value.

17. (Currently Amended) A power supply controller comprising:

an output coupled to drive an output transistor to provide a load current through an energy storage inductor to form an output voltage; and

a control block coupled to organize drive pulses to the output transistor into a plurality of sets having a plurality of timing slots for driving the output transistor wherein the control block provides a control signal to delete a first drive pulse in a first set of the plurality of sets from a first timing slot when the load current is less than a first current value wherein the control block is configured to increase the number of deleted drive pulses from each successive set of the plurality of sets so that each successive set has deleted more drive pulses than an immediately prior set.

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18. (Original) The power supply controller of claim 17 wherein the control block coupled to organize drive pulses includes the power supply controller providing the control signal to delete a second drive pulse from a second timing slot in a second set of the plurality of sets after the power supply controller has issued the first set.

19. (Currently Amended) The power supply controller of claim 17 wherein the control block coupled to organize drive pulses includes the power supply controller ~~coupled~~ configured to re-insert at least one deleted drive pulse when the output voltage decreases to a first voltage wherein each successive set includes more drive pulses that a set that was immediately prior.

20. (Original) The power supply controller of claim 19 wherein the control block coupled to organize drive pulses includes the power supply controller coupled to re-insert all deleted drive pulse when the output voltage decreases to a second voltage that is less than the first voltage.